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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/833,106	04/04/97	SMALL J	74892MSS

001333 WM02/0328
PATENT LEGAL STAFF
EASTMAN KODAK COMPANY
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ROCHESTER NY 14650-2201

EXAMINER	
WHITE, M	
ART UNIT	PAPER NUMBER
2612	23

DATE MAILED: 03/28/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
08/833,106	Small
Examiner	**Group Art Unit**
Mitchell White	2612

☒ Responsive to communication(s) filed on *Mar 5, 2001*

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) *2-4 and 11-13* is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *2-4 and 11-13* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Request for Continued Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/5/01 has been entered.

Claim Rejections - 35 USC § 103

2. ***The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:***

> ***(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.***

3. **Claim 2-4 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koike et al. in view Ohta (US 6,108,008).**

Regarding claim **4**, Koike et al. discloses, in fig. 1, a color image reading apparatus in which an image is formed on a multi-chip image sensor (5), converted into an electrical signal, and applied to a head amplifier section (6), where it is digitized and amplified. The image signal is

then sent to a signal processing section (7) where it is initially processed and stored in memory (8, col. 4, lines 37-45). The image signal data is then compressed by the CPU (11) and stored in memory (12, col. 5, lines 54-58). Koike et al. further discloses a memory (13) which is a nonvolatile memory (col. 6, lines 37-43) that stores color correcting coefficients calculated by CPU (11) which allows for compensation of color reproducing characteristics of output equipment such as a printer such as color space transformation (col. 2, lines 10-22) by using the CPU (11) and the stored correction coefficients stored in memory (13) to correct the image data (col. 6, lines 8-26). Since Koike et al. discloses compensating for output equipment such as a printer, a printer interface is inherent in the Koike et al. image reading apparatus. Koike et al. does not explicitly state that the image data is decompressed. However, it would have been obvious to decompress the image data in order to use the processed image data. Koike et al. does not explicitly stated that memory (12) is a nonvolatile memory. However, it would have been obvious for memory (12) to be a nonvolatile memory so that the image data would not be lost due to power failure. Koike et al. does not disclose a first and second color transformation or a printer interface for receiving process color and printing process parameters from different printers having different predetermined processes. However, Ohta discloses a first color space transformation and compression transforming R, G, B values into L*a*b* values then further converting into L*'a*'b*' and then to R, G, B values which are displayed which infers decompression (col. 9, lines 1-21). Therefore, it would have been obvious to modify the Koike et al. image reading apparatus to include a first and second color space transformations as taught by

Ohta to exactly reproduce the desired color and to achieve previewing on the monitor. Ohta further discloses, in fig. 2, an image processing apparatus which includes a printer condition setting means (9) used to set various output conditions of the connected printer, or the parameters relating to the color process defined and contains printer setting means (8) for setting the kind of the connected printer and binarization method setting means (6) for setting the binarizing method to be employed in the printer (col. 4, lines 16-22). The output profile memory (7) stores the output profile representing the printer characteristics (col. 4, lines 53-60). Therefore, it would have been obvious to modify the Koike et al. image reading apparatus to printer interface for receiving process color and printing process parameters from different printers having different predetermined processes to provide the convenience of interchangeable printers.

Regarding claim **2**, Koike et al. discloses, in fig. 1, a memory (13) which stores correction coefficients used to correct image data (col. 5, lines 23-30).

Regarding claim **3**, Koike et al. performing error diffusion in response to a requisition from a printer and controlling a series of operations from the processing of the signals from the color original with the CCD sensor up to the transmitting of the signals through the error diffusing circuit (col. 1, lines 33-40).

Regarding claim **11**, Koike et al. discloses, in fig. 1, a color image reading apparatus in which an image is formed on a multi-chip image sensor (5), converted into an electrical signal, and applied to a head amplifier section (6), where it is digitized and amplified. The image signal is then sent to a signal processing section (7) where it is initially processed and stored in memory (8,

col. 4, lines 37-45). The image signal data is then compressed by the CPU (11) and stored in memory (12, col. 5, lines 54-58). Koike et al. further discloses a memory (13) which is a nonvolatile memory (col. 6, lines 37-43) that stores color correcting coefficients calculated by CPU (11) which allows for compensation of color reproducing characteristics of output equipment such as a printer such as color space transformation (col. 2, lines 10-22) by using the CPU (11) and the stored correction coefficients stored in memory (13) to correct the image data (col. 6, lines 8-26). Since Koike et al. discloses compensating for output equipment such as a printer, a printer interface is inherent in the Koike et al. image reading apparatus. Koike et al. does not explicitly state that the image data is decompressed. However, it would have been obvious to decompress the image data in order to use the processed image data. Koike et al. does not explicitly stated that memory (12) is a nonvolatile memory. However, it would have been obvious for memory (12) to be a nonvolatile memory so that the image data would not be lost due to power failure. Koike et al. does not disclose color filter interpolation, first and second color transformations, or a printer interface for receiving process color and printing process parameters from different printers having different predetermined processes. However, Ohta discloses color filter interpolation (col. 6, lines 55-61). Therefore, it would have been obvious to modify the Koike et al. image reading apparatus to include color filter interpolation as taught by Ohta to reduce the number of calculation required for the color measurements in the LUT. Ohta discloses a first color space transformation and compression transforming R, G, B values into L*a*b* values then further converting into L*'a*'b*' and then to R, G, B values which are displayed

which infers decompression (col. 9, lines 1-21). Therefore, it would have been obvious to modify the Koike et al. image reading apparatus to include a first and second color space transformations as taught by Ohta to exactly reproduce the desired color and to achieve previewing on the monitor. Ohta further discloses, in fig. 2, an image processing apparatus which includes a printer condition setting means (9) used to set various output conditions of the connected printer, or the parameters relating to the color process defined and contains printer setting means (8) for setting the kind of the connected printer and binarization method setting means (6) for setting the binarizing method to be employed in the printer (col. 4, lines 16-22). The output profile memory (7) stores the output profile representing the printer characteristics (col. 4, lines 53-60). Therefore, it would have been obvious to modify the Koike et al. image reading apparatus to printer interface for receiving process color and printing process parameters from different printers having different predetermined processes to provide the convenience of interchangeable printers.

Regarding claim **12**, Koike et al. discloses, in fig. 1, a memory (13) which stores correction coefficients used to correct image data (col.5, lines 23-30).

Regarding claim **13**, Koike et al. performing error diffusion in response to a requisition from a printer and controlling a series of operations from the processing of the signals from the color original with the CCD sensor up to the transmitting of the signals through the error diffusing circuit (col. 1, lines 33-40).

Conclusion

4. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications intended for entry)

Or:

(703) 308-6306 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mitchell White whose telephone number is (703) 305-8155. The examiner can normally be reached on Monday-Thursday from 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber, can be reached on (703) 305-4929.

Any inquiry of general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

MLW

March 24, 2001

WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600